

CLAIMS

1. Method for checking the brake (22) of an electric motor (21), characterized in that in a measuring sequence in speed-regulated operation the brake (22) is applied for a short time and at least during this time a motor current ( $I_{des}$ ,  $I_{act}$ ) is measured and on the basis of the measured data obtained in this way the brake torque ( $M_{br}$ ) of the brake (22) is determined.
2. Method according to claim 1, characterized in that the brake torque ( $M_{br}$ ) is determined on the basis of the motor currents ( $I_1$ ,  $I_2$ ) with the brake (22) released and applied.
3. Method according to claim 1, characterized in that the brake (22) is applied for the time of at least one motor revolution.
4. Method according to claim 1, characterized in that brake application is repeated in a measuring sequence.
5. Method according to claim 1, characterized in that there is a reversal of the rotation direction of the motor (21) between brake applications or after groups of brake applications for the same rotation direction.
6. Method according to claim 1, characterized in that the measurement is performed during a movement of the motor (21), which is assisted by an optionally present gravitational moment.
7. Method according to claim 1, characterized in that the motor and/or brake temperature ( $T_{br}$ ) is measured and used for correcting the determined brake torque ( $M_{br}$ ).
8. Method according to claim 1, characterized in that (the measuring data) <sup>nr 3</sup> ( $N_{act}$ ,  $I_{des}$ ,  $I_{act}$ ,  $T_{br}/U_{br}$ ;  $M_{br}$ ) are recorded.
9. Method according to claim 1, characterized in that the measuring data <sup>NR</sup> ( $N_{act}$ ,  $I_{des}$ ,  $I_{act}$ ,  $T_{br}/U_{br}$ ;  $M_{br}$ ) are displayed.
10. Method according to claim 1, characterized in that the measuring data <sup>NR</sup> ( $N_{act}$ ,  $I_{des}$ ,  $I_{act}$ ,  $T_{br}/U_{br}$ ;  $M_{br}$ ) are printed out.
11. Method according to claim 1, characterized in that the measuring data <sup>NR</sup> ( $N_{act}$ ,  $I_{des}$ ,  $I_{act}$ ,  $T_{br}$ ;  $M_{br}$ ) of different measuring sequences are automatically compared.